

L Number	Hits	Search Text	DB	Time stamp
1	109	heat\$5 near9 air near9 rotat\$9 same (granul\$8 pellet\$9)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 16:25
2	70	(heat\$5 hot) near9 (stream gas\$4 air) same rotating same (granulating pelletizing)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 16:27
3	17	(size near6 powder) same rotating same (granulating pelletizing)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 16:30
4	159	(size micron) near6 (dust powder) same rotat\$5 same (granulat\$5 pelletiz\$8)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 16:33
5	159	(size micron) near6 (dust powder) same rotat\$5 same (granulat\$5 pelletiz\$8)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 16:34
6	30	((size micron) near6 (dust powder) same rotat\$5 same (granulat\$5 pelletiz\$8) ) same (agglomerat\$6 compact\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 16:35
-	235	rotat\$8 near9 speed and (iron near3 oxide) and (pellet\$9 granul\$9) and ((polyvinyl near3 alcohol) PVA)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 16:10
-	0	rotat\$8 near9 speed same (pellet\$9 granul\$9) and (iron near3 oxide) same ((polyvinyl near3 alcohol) PVA)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 14:19
-	24	rotat\$8 near9 speed same (pellet\$9 granul\$9) and (iron near3 oxide) and ((polyvinyl near3 alcohol) PVA)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 14:32
-	485	rotat\$8 near9 speed same (pellet\$9 granul\$9) near9 size	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 14:36
-	14	(rotat\$8 near9 speed same (pellet\$9 granul\$9) near9 size) same binder same water	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 14:36

L Number	Hits	Search Text	DB	Time stamp
1	332	compact\$8 near9 (powder dust) near9 rotat\$8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:29
2	883	(compact\$8 agglomerat\$6 granulat\$8) near9 (powder dust) near9 rotat\$8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:31
3	639	((compact\$8 agglomerat\$6 granulat\$8) near9 (powder dust) near9 rotat\$8) not binder	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:31
4	288	(compact\$8 near9 (powder dust) near9 rotat\$8) not binder	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:31
5	163	((compact\$8 agglomerat\$6 granulat\$8) near9 (powder dust) near9 rotat\$8) near9 (pan disk disc plate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:32

L Number	Hits	Search Text	DB	Time stamp
1	868	eirich	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:46
2	445	eirich and rotat\$6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:47
3	112	eirich same rotat\$6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:47
4	8	(eirich same rotat\$6) same binder same water	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:47
5	10	(eirich same rotat\$6) same spray\$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/23 17:48

DERWENT-ACC-  
NO: 1980-29641C

DERWENT-  
WEEK: 198017

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TITLE: Granulating pigment powder in fluidised bed - by treating with granulation aid,  
e.g. alkyd resin (NL 9.4.80)

INVENTOR: HOSSACK, J; LAWRENCE, S G

PATENT-ASSIGNEE: HOSSACK, J LAWRENCE, S G CIBA GEIGY AG[CIBA]

PRIORITY-DATA: 1978GB-0039682 (October 6, 1978)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 2940156 A	April 17, 1980	N/A	000	N/A N/A N/A N/A N/A N/A N/A N/
CA 1154635 A	October 4, 1983	N/A	000	A N/A N/A N/A
CH 643875 A	June 29, 1984	N/A	000	
DK 7904199 A	May 5, 1980	N/A	000	
FR 2438073 A	June 6, 1980	N/A	000	
GB 2036057 A	June 25, 1980	N/A	000	
GB 2036057 B	April 13, 1983	N/A	000	
IT 1125449 B	May 14, 1986	N/A	000	
JP 55054355 A	April 21, 1980	N/A	000	
NL 7907417 A	April 9, 1980	N/A	000	
US 4277288 A	July 7, 1981	N/A	000	

INT-CL (IPC): B01J002/16, B01J002/28 , B01J013/02 , C08K009/00 , C09B067/00 , C09C003/00

ABSTRACTED-PUB-NO: DE 2940156A

BASIC-ABSTRACT:

Prodn. of dry, low-dusting, free-flowing pigment granules comprises (a) treating the pigment powder in a fluidised bed with a granulating auxiliary; (b) opt. treating the granular prod. with a surfactant, then (c) removing granules from the bed.

Pref. the powder is dry-milled or sieved conventionally before use. The pigment may be organic (azo, azomethine, (or their metal salts or complexes), opt. halogenated metal phthalocyanines, polycyclics such as quinacridones, dioxazines, vat dyes, anthraquinones or isoindolines, or salts of basic pigments with heteropolyacids of P, W, Mo or Cu ferrocyanide) or inorganic (TiO<sub>2</sub>, red or yellow Fe oxides, Prussian blue, Pb or Mo chromate, cadmium red or C black). Typical granulating auxiliaries are alkyd resins, opt. modified with synthetic fatty acids, or polyamide waxes.

Granules are easily dispersed in organic media.

DERWENT-CLASS: A97 E24 G01

CPI-CODES: A12-W11; A12-W12C; E11-R; E25; E31-N02; E35; G01-B;

DOCUMENT-IDENTIFIER: US 20010021389 A1

TITLE: Calcium phosphate microcarriers and microspheres

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Detail Description Paragraph - DETX (52):

[0069] More specifically, a microbead of polyethylene wax or other wax or organic material is formed by spraying from a melt and re-solidifying at a lower temperature. Size of the microbeads is determined by the size of the spraying orifice and the pressure under which the organic material or wax is sprayed. Wax or other organic microbeads also can be produced, for example, by compaction of wax powders by rolling in heated ball mills or pan pelletizers or by rolling the powders and gradually adding a solvent to the powders to consolidate them in the form of beads. The size of the beads is controlled by the particle size of the starting powder, heat of the ball mill or pan pelletizer, speed of rotation of the ball mill or pan pelletizer, size of the ball mill or pan pelletizer, length of rolling time, and amount and speed of addition of an organic solvent system. The desired size of bead is obtained by screening. This screening process also removes the unconsolidated powders from the powder consolidation method.

## Detail Description Paragraph - DETX (55):

[0072] In the case of preparation by compaction of ceramic powders onto wax/organic beads, wax/organic beads are prepared as previously described in this example. A fine ceramic powder distribution is obtained by numerous methods well known in the art. An example of such a method is dry ball milling and subsequent wet ball milling. The wet milled powder is subsequently dried and further ball milled or air jet milled to break up agglomerates. The resulting powder and wax/organic microbeads of the desired size are placed in a ball mill, pan pelletizer or other container and rolled or vibrated to compact the powders onto the wax/organic microbead. The use of a dense micro-media may also be added to a ball mill or other container to further compact the powders onto the wax/organic microbeads. Furthermore, the resulting shell thickness and density of the ceramic coating is controlled by the energy imparted to the fabricated bead. The amount of energy is controlled by the amount of time of compaction, and speed of rotation or vibration, and/or addition of liquid to promote the agglomeration of powders onto the wax/organic microbeads. Excess or unconsolidated powders are removed from the coated microbeads by sieving through screens of sufficient size to retain the coated microbeads and allow excess powders and compacting media to pass through. The wax/organic is removed as previously described and the ceramic microspheres are classified to size by methods previously described in this example, and sintered to the desired density. The above-mentioned methods are applicable to the formation of CaP-coated wax/organic microbeads.